Smoking during teenage years can cause permanent genetic changes in the lungs.



It is estimated that smoking causes some 440,000 premature deaths every year, of which about a quarter are from lung cancer and around one fifth are from chronic obstructive lung disease bronchitis and emphysema. The respiratory system is vital to life and anything which prevents it functioning can result in death. Often cancers of these organs are not discovered until it is too late to cure them: 93% of lung cancer patients die within five years of diagnosis and 75% die within the first year.

# Lung cancer

Lung cancer kills more people than any other type of cancer and around 90% of these deaths are caused by smoking. The risk of lung cancer increases directly with the number of cigarettes smoked. In a study of US males, deaths from lung cancer in smokers and non smokers were as follows:

# Number of cigarettes smoked per day Annual

# Annual death rate per 100,000 men

0 1-14 15-25 25 or more 10
78 (8 times that of non-smokers)
127 (13 times that of non-smokers)
251 (25 times that of non-smokers)

# Increased risk of developing lung cancer

The younger a person is when he or she starts smoking, the greater the risk of developing lung cancer. A US study found that smoking during the teenage years causes permanent genetic changes in the lungs and forever increases the risk of lung cancer, even if the smoker subsequently stops.

### Chronic obstructive pulmonary disease (COPD)

Chronic obstructive pulmonary (lung) disease (including chronic bronchitis and emphysema) is a progressively disabling disease. It can cause prolonged suffering due to difficulty in breathing because of the obstruction or narrowing of the small airways in the lung and the destruction of the air sacs in the lung due to smoking. These are essential for the exchange of oxygen in the blood: when they break down, the lung loses its elasticity and there is less surface in the lung to absorb oxygen. The onset of the disease is very gradual and breathlessness only becomes troublesome when about half of the lung has been destroyed. The disease is rarely reversible once established. Smoking is the main cause of chronic obstructive lung disease: it is very rare in non-smokers and at least 80% of the deaths from this disease can be attributed to cigarette smoking.

#### **Pneumonia**

Pneumonia is not only more common amongst smokers, but is also much more likely to be fatal.



After ten years an ex-smoker's risk for lung cancer is about a third to half that of smokers.



#### **Asthma**

Secondhand smoke is an established trigger for the onset of asthma in children and there is growing evidence that it is also a causal factor in adult non-smokers exposed to tobacco smoke.

# Morbidity in the young

Children of smoking parents have more respiratory illnesses than those of non-smokers and children who smoke have more chest illnesses than non-smokers.

# The benefits of quitting

The risk of lung cancer, like all other cancers, increases steeply with advancing age. When smokers quit, their risk of getting lung cancer starts decreasing so that after 10 years an ex-smoker's risk is about a third to half that of continuing smokers. Stopping smoking before the age of 30 avoids more than 90% of the risk attributable to smoking.

# Five tips for quitting

Studies have shown that these five steps will help you quit and quit for good. You have the best chances of quitting if you use these five steps to develop and maintain your own quit plan.

- 1. Get ready.
- 2. Get support.
- 3. Learn new skills and behaviors.
- 4. Get medication and use it correctly.
- 5. Be prepared for difficult situations.

Talk to your health care provider, they can help. If you do not have insurance or just need to talk call the Washington Tobacco Quitline.



We also recommend: www.secondhandsmokesyou.com www.cdc.gov/tobacco

